IN THE SPECIFICATION:

Please replace the first full paragraph of specification page 6 with the following replacement paragraph:

— As shown in Fig. 1, four bytes are needed to express the state of each VLAN being mentioned in a given GVRP PDU message 100. Because most enterprise networks typically employ only on the order of one to two hundred VLANs or less, this 4-byte per VLAN requirement does not impose significant burdens on the network. In fact, many enterprise networks. Instead, they limit the spread of multicast MAC addresses, and accept the waste of bandwidth when VLAN associated broadcast, multicast or flooded unicast frames are sent into areas of the network in which no entities associated with the corresponding VLAN are located. —

Please replace the first full paragraph of specification page 13 with the following replacement paragraph:

— The vector message 408 similarly has a plurality of fields including a 1-byte attribute type field 420, one or more variable length attribute structure fields, such <u>as</u> attribute structure 1 field 422a, attribute structure 2 field 422b and so on to attribute structure M field 422c, and a 1-byte end of mark field 424. Again, the attribute type field 420 is preferably loaded with an as yet unassigned value, such as "4", that all entities running the compact-GVRP protocol are configured to recognize as identifying a vector message. Each attribute structure field 422 comprises a plurality of fields. For example, attribute structure 1 field 422a has an attribute length field 424 and one or more encoded VLAN registration information fields 428, such as encoded VLAN registration information 1 field 428a, encoded VLAN registration information 2 field 428b and so on up to encoded VLAN registration information N field 428c. Each encoded VLAN registration field 428 carries an encoded value corresponding to the VLAN registration events of six VLANs. The first encoded VLAN registration information field 428a carries an encoded value for VLAN IDs 1 through 6. The second encoded VLAN registration information field 428b carries an encoded value for VLAN IDs 7 through 12. The third encoded VLAN registration information field carries an encoded value for VLAN IDs 13 through 18, and so on. In other words, each encoded VLAN registration information field 428 carries an encoded value for six sequential VLAN IDs. In the illustrated embodiment, each encoded value, moreover, is a 2-byte integer that encodes one of five possible VLAN registration states for six different VLANs. Accordingly, VLAN registration information for all 4094

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VLANs can be encoded within 683 2-byte encoded VLAN registration information fields

428, thereby satisfying the 1500-byte limit of Ethernet links. —

Please replace the third full paragraph of specification page 14 with the following replacement paragraph:

— As mentioned above, the compact-GVRP application component 302 for each port operates in either the compatible mode 330 or one of the two compact modes 332 and 334. When operating in the compatible mode, the application component 302 generates and issues a modified version of the standard GVRP PDU message format specified in the 802.1D/802.1Q specification standards. In particular, the standard GVRP PDU message is modified to include a negotiation message having the same format as negotiation message 406 described above. The inclusion of a negotiation message 406 in an otherwise standard format GVRP PDU message signals that the device sending the modified GVRP PDU message is compliant with the compact-GVRP mechanism disclosed herein. In this way, two or more compact-GVRP compliant bridges that are coupled are together, e.g., via a point-to-point link or a shared medium, can discover the existence of each other. Nonetheless, because the negotiation message 406 uses an attribute type value, e.g., "2", that is not otherwise assigned by the conventional GVRP protocol, standard GVRP implementations simply ignore the presence of the negotiation message. —

Please replace the first full paragraph of specification page 17 with the following replacement paragraph:

— After transmitting the first just_kidding message 500, component 302 transmits just_kidding messages 500 only upon expiration of its just_kidding timer 318, which as described above is preferably on the order of ten times the value of the Leave_all timer 322. If the just_kidding timer 318 expires, component 302 restarts timer 318 and also starts its leave timer 319. Component 302 also generates and sends a Leave_all GVRP PDU message containing a just_kidding message 500 as described above. If the leave timer 319 expires without component 302 having received any conventional GVRP PDU messages, in other words component 302 has only received either compact-GVRP PDU messages or modified GVRP-PDU message-messages, i.e., GVRP PDU messages that have a negotiation message 406, then mode selection unit 328 switches operation to (or stays in) slow compact mode 334, provided that compact-GVRP PDU and/or modified GVRP PDU messages have been received from more than one other device, as determined by comparing the source identifier from field 416 of the received messages to the contents of the port_partner variable 336. If all of the compact-GVRP PDU and/or modified GVRP PDU messages that have been received have the same source identifier, then unit 328 switches operation to (or stays in) the fast compact mode 332 of operation. —

Please replace the third full paragraph of specification page 22 with the following replacement paragraph:

— As shown, an applicant state machine 310 can be in any of the following different states: Very Anxious Active (VA), Anxious Active (AA), Quiet Active (QA), Leaving Active (LA), Very Anxious Passive (VP), Anxious Passive (AP), Quiet Passive (QP), Very Anxious Observer (VO), Anxious Observer (AO), Quiet Observer (QA), or Leaving Observer (LO). Some events, in addition to causing a change of state, also cause an action. For example, receipt of a transmitPDU! event while in the VA state causes a transition to the AA state and the sending of a JoinIn (sJI) attribute event for this VLAN if the registrar state machine is in the IN state in a compact-GVRP PDU message 400. Otherwise, a JoinEmpty (sJE) attribute event is sent. Receipt of a transmitPDU! while in the LA state causes a transition to the VO state and the sending of a Leave Empty attribute event (sLE) for this VLAN within a compact-GVRP PDU message 400. Because the receipt of an In attribute event does not cause a state change regardless of the current state, no entry or row is shown in Fig. 7 for the In attribute event. —